



CLS RGB LED Par 56 V3/Polish

version 1.3 August 2009

1. INTRODUCTION

Thank you for selecting the CLS RGB LED PAR 56 V3 with 512 DMX-channels. The CLS RGB LED PAR 56 V3 is a universal DMX controlled luminaire that uses 151 5mm LEDs to create an even light-output. The CLS RGB LED PAR 56 V3 works on an input voltage of 100 ~ 240 VAC.

Available RGB LED Pars V3

- CLS RGB LED Par 56 V3 (item nr. 875550)
- CLS RGB LED Par 56 V3 Polish (item nr. 875552)

The CLS RGB LED PAR 56 V3 features:

- 100 ~ 240 VAC input
- DMX input (3/5 channels)
- Auto-change mode
- Stand alone or DMX 512 controllable
- Dip switches
- Manual setting
- Indoor use only



Included items

The CLS RGB LED PAR 56 V3 is shipped in one package containing the following items:

- 1 RGB LED PAR 56 V3
- 1 User manual
- 1 Filter frame

Optional Accessories

- CLS DMX controller ACX60, 60 DMX channels (item nr. 707030)
- CLS DMX cable 0.8 meters (item nr. 911200)
- CLS DMX cable 1.5 meters (item nr. 911201)
- CLS DMX cable 3.0 meters (item nr. 911203)
- CLS DMX cable 5.0 meters (item nr. 911205)
- CLS DMX cable 10.0 meters (item nr. 911206)
- CLS DMX cable 15.0 meters (item nr. 911207)
- CLS DMX cable 20.0 meters (item nr. 911209)

Note: It is important to read this manual before you install this product.

2. SAFETY INFORMATION

Warning! This product is for professional use only.

Read this manual before powering up or installing the CLS RGB LED PAR 56 V3. Follow the instructions listed below and observe all warnings in this manual.

Protection from electric shock

- Disconnect the power supply from AC power before installation, dismantling or maintenance of the unit.
- Make sure all connectors are connected properly.
- Use only a source of AC power that complies with local building and electrical codes.
- Do not expose the unit to rain or moisture.
- Refer all service to a qualified technician.

Protection from burns and fire

- Provide a clearance of at least 50 mm around the unit.
- Do not install the RGB LED PAR V3 near to a heat source.
- Do not install the RGB LED PAR V3 in a corrosive, flammable or explosive area.
- Do not modify the RGB LED PAR V3, or install other than genuine parts.
- Do not operate the unit if the ambient temperature exceeds 50°C.
- Operate in a well-ventilated area

Protection from damage due to falls

- Verify that all covers and mounting hardware is securely fastened.
- Block access below the work area whenever installing or removing the unit.

3. INSTALLATION

This section describes in general terms how to install the CLS RGB LED PAR 56 V3, and how to connect it to a DMX data link.

3.1. Installing the CLS RGB LED PAR 56 V3

The CLS RGB LED PAR 56 V3 can be installed in different ways.
You can support it on a shelf, or mount it by using the mounting hole.

3.2. Data linking multiple CLS RGB LED PAR 56 V3

You need to create a data link if you want to control one or more CLS RGB LED PAR 56 V3 via a DMX controller. The CLS RGB LED PAR 56 V3 can be data-linked by using the XLR 3 input and output connectors at the back of the unit.

To set up a data link you have to take the following steps:

- Disconnect all the units from the AC supply.
- Connect the XLR 3 female connector of the first CLS RGB LED PAR 56 V3 to a DMX extension cable. Connect the other end of the DMX cable to the XLR 3 male of the next CLS RGB LED PAR 56 V3. You can use CLS DMX cables for this purpose.
- Continue connecting CLS RGB LED PAR 56 V3 in this 'daisy chain' way.
- A maximum of 32 units can be connected in this way.

4. DMX OPERATION

4.1 3 channel DMX Operation

With 3 channel DMX operation you need 3 DMX channels to control the CLS RGB LED PAR 56 V3.

First set the function switches to DMX 3 channel operation:

1	2	3	4	Mode
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DMX 3 channel operation

<input checked="" type="checkbox"/>	= on
<input type="checkbox"/>	= off

Now you can give the CLS RGB LED PAR56 V3 a DMX address with the selection switches:

1	2	3	4	5	6	7	8	9	10	First DMX-channel
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	32
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	64
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	128
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	256

<input checked="" type="checkbox"/>	= on
<input type="checkbox"/>	= off

Example:

DMX address 5

1	2	3	4	5	6	7	8	9	10
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DMX address 174

1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DMX address 36

1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DMX address 348

1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The functions of the 3 channels are:

Channel	Function
1	Red
2	Green
3	Blue

4.2 5 channel DMX operation

With 5 channel DMX operation you need 5 DMX channels to control the CLS RGB LED PAR 56 V3.

First set the function switches to DMX 5 channel operation:

1	2	3	4	Mode
				DMX 5 channel operation

	= on
	= off

Now you can give the CLS RGB LED PAR 56 V3 a DMX address with the selection switches. See table on page 3.

Channel 1 value	Function
0 - 63	RGB control, CH2 = red, CH3 = green, CH4 = blue
64 - 127	7 colour fade, CH5 = speed control
128 - 191	7 colour change, CH5 = speed control
192 - 255	3 colour change, CH5 = speed control
Channel 2 value	
0 - 255	Red
Channel 3 value	
0 - 255	Green
Channel 4 value	
0 - 255	Blue
Channel 5 value	
0 - 10	No speed
11 - 100	Fast to low speed
101 - 150	No speed
151 - 255	Speed control by unit, (potentiometer)

5. STAND-ALONE OPERATION

!WARNING

ATTENTION!
BEFORE SETTING A STAND-ALONE MODE, FIRST UNPLUG THE EXTERNAL DMX CABLE TO A DMX CONTROLLER. YOU DON'T NEED A DMX CONTROLLER FOR THESE MODES!

5.1 STATIC COLOURS

You can set the CLS RGB LED PAR 56 V3 on a fixed colour. First set the function switches to Static Colour Mode

1	2	3	4	Mode
				Static colour mode

Now create a colour you wishes with the selection-switches:

	= on
	= off

1	2	3	4	5	6	7	8	9	10	Colour	Brightness
										RED	0%
										GREEN	0%
										BLUE	0%
										RED	14%
										GREEN	14%
										BLUE	14%
										RED	28%
										GREEN	28%
										BLUE	28%
										RED	42%
										GREEN	42%
										BLUE	42%
										RED	57%
										GREEN	57%
										BLUE	57%
										RED	71%
										GREEN	71%
										BLUE	71%
										RED	85%
										GREEN	85%
										BLUE	85%
										RED	100%
										GREEN	100%
										BLUE	100%

Example:
Magenta

1	2	3	4	5	6	7	8	9	10

Yellow

1	2	3	4	5	6	7	8	9	10

Cyan

1	2	3	4	5	6	7	8	9	10

5.2 Colour changing

With this mode, the CLS RGB LED PAR 56 V3 will show you a stepping colour-changing program. You can set the speed of this program by a potentiometer or by music.

1	2	3	4	Mode
			*	Stand-alone operation

* = dip switch on = Speed control by music
dip switch off = Speed control by potentiometer

5.3. Colour changing with 1 Master and maximum 3 Slaves

With this mode you can create a lightshow without a DMX controller. 1 CLS RGB LED PAR 56 V3 must set as master and all other CLS LED PARs as slave units.

1	2	3	4	Mode
			*	Stand-alone master operation

* = dip switch on = Speed control by music
dip switch off = Speed control by potentiometer

And set all other CLS RGB LED PAR 56 V3 to slave operation:

1	2	3	4	Mode
				Stand-alone slave operation

	= on
	= off

All slaves must be set with a DMX address with the selection switches. Every unit needs 5 channels, so the first slave must be set on address 6, the second on 11 and the third on 16.

Connect the master with a DMX cable to the first slave, connect the first slave with a DMX cable to the second slave and connect the second slave with a DMX cable to the third slave.

Now you can choose how you want to change the colours. Fading or stepping.

5.4 Fading colour changes

For fading colour changes with 1 master and maximum 3 slaves set the selection switches from the master on the right position.

1	2	3	4	5	6	7	8	9	10	Function
										Fading colour changes

The selection-switches of the slaves must be "off".

5.5 Stepping colour changes

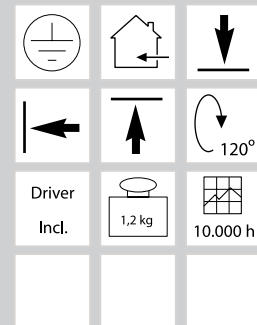
For stepping colour changes with 1 master and maximum 3 slaves, set the selection-switches from the master on the right position.

1	2	3	4	5	6	7	8	9	10	Function
										Stepping colour changes

The selection-switches of the slaves must be "off".

TECHNICAL SPECIFICATIONS

Power supply:	Voltage: 100 ~ 240 VAC
Power consumption:	Max 18 VA
Primary fuse:	2,5A Fast
Secondary fuse:	100 mA
Weight:	1,2 kg
Dimensions:	220 x 210 x 220 mm (hwxwd) (without bracket)
Dimensions filter frame:	198 x 198 mm (hwx)
Control in & output:	XLR 3 pole male-female
Control cable:	120 ohm DMX cable
Control signal:	DMX 512/1990
Working temperature:	0 to +50 °C
Housing:	High temperature powder coated steel (item nr. 875550) Polished steel (item nr. 875552)



LIST OF SYMBOLS

	Protection class One, two or three		Cable length Maximum cable attached on the fixture in centimeters
	Application area Indoor or outdoor		Driver Inclusive or exclusive
	Application area Floor, wall or ceiling		Weight In gram/kilogram
	Swivel Fixture is horizontally rotatable, indicated in degrees		Pressure Maximum pressure on the fixture per kg/cm ²
	Swivel Fixture is vertically rotatable, indicated in degrees		Lifespan Of the light source in hours
	Multiple connection Possibilities on a fixture		Curve Minimal bending curve in centimeters
	Installation depth In centimeters		LED pitch Pitch between the LEDs in millimeters
	Mounting hole In centimeters		

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